

SYSTEM FOR NETWORKED COMPONENT ADDRESS AND LOGICAL
NETWORK FORMATION AND MAINTENANCE

Abstract

5 A system for forming and maintaining one or more networks of devices
connected to a shared includes processes for: (a) forming a logical network on the
shared media; (b) discovering devices connected to the shared medium; (c) assigning
(or acquiring) devices to a logical network; and (d) maintaining a logical network. The
system also defines a message format and protocol for communication over the shared
10 media. The protocol uses a two-level address scheme (e.g., a logical network ID and a
device ID) and defines several message types used to support the above processes and
other useful features. A logical network includes an address space arbiter (ASA) and,
typically, one or more devices attached to the shared media. An acquisition authority
(AA), interacting with the ASA, is required to complete acquisition of a device by a
15 logical network.

<p>CERTIFICATE UNDER 37 CFR 1.10:</p> <p>"Express Mail" mailing label number: <u>EH974036470US</u></p> <p>Date of Deposit: <u>April 24, 2000</u></p> <p>I hereby certify that this paper or fee is being deposited with the U.S. Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to BOX PATENT APPLICATION, Assistant Commissioner for Patents, Washington, D.C. 20231.</p> <p>By: <u>Kay Howe</u></p> <p>Name: <u>Kay Howe</u></p>
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